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Opioid Stewardship

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<https://escholarship.org/uc/item/8gr672d1>

Journal

Primary Care Clinics in Office Practice, 53(1)

ISSN

0095-4543

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Publication Date

2026-03-01

DOI

10.1016/j.pop.2025.09.005

Peer reviewed

Opioid Stewardship



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KEYWORDS

• Opioids • Chronic pain • Opioid use disorder • Harm reduction

KEY POINTS

- Primary care clinicians have essential roles in the crisis of opioid-related harms.
- Opioid stewardship involves safe prescribing, careful assessment of opioid-related risks and derived benefits, early identification of opioid use disorder (OUD), and linkage to evidence-based treatment.
- Medications for OUD can be effectively initiated and managed in primary care.

INTRODUCTION

The opioid crisis remains a major public health challenge in the United States, with profound consequences for individuals, families, and communities. Since the 1990s, the surge in opioid prescribing for pain management—followed by rising misuse, dependence, and overdose—has contributed to a complex epidemic driven by both prescription and illicit opioids.¹ In 2023 alone, over 100,000 overdose deaths occurred in the United States, with opioids involved in most cases.² Amid this ongoing crisis, primary care providers (PCPs) play a dual role: They are frontline prescribers of opioids for acute and chronic pain, prescribing more opioids than any other specialty,³ and they often serve as an important first point of contact for individuals with opioid use disorder (OUD).⁴

Opioid stewardship has emerged as an important framework for guiding safer and more effective opioid prescribing, while ensuring that patients with pain or substance use disorders receive evidence-based and compassionate care. Drawing from principles of antimicrobial stewardship and chronic disease management,⁵ opioid stewardship emphasizes patient-centered prescribing, regular risk assessment and monitoring, early identification of OUD, and access to treatment, including medications for opioid use disorder (MOUD) such as buprenorphine.

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Abbreviations	
AHRQ	Agency for Healthcare Research and Quality
ASAM	American Society of Addiction Medicine
CDC	Center for Disease Control and Prevention
CPAs	collaborative practice agreements
DAST	Drug Abuse Screening Tool
LTOT	long-term opioid therapy
MI	motivational interviewing
MME	morphine milligram equivalents
MOUD	medications for opioid use disorder
NQF	National Quality Forum
ORT	Opioid Risk Tool
OD	opioid use disorder
PCPs	primary care providers
PDMPs	prescription drug monitoring programs
PEG	Pain, Enjoyment, and General Activity
UDS	urine drug screening

In primary care, implementing opioid stewardship practices can be particularly challenging due to competing demands, limited addiction medicine training, and systemic barriers. However, its potential impact is significant: Improving pain care, reducing overdose, and decreasing stigma. This article outlines current epidemiologic trends, best practices, and system-level strategies to support effective opioid stewardship in primary care.

EPIDEMIOLOGY AND PUBLIC HEALTH IMPACT

Opioid prescribing peaked in the early 2010s after a rapid rise in the 1990s and 2000s, partly in response to concerns about undertreated pain.⁶ Increased awareness of addiction risks and tighter regulations led to substantial reductions in opioid prescribing—down more than 40% since 2012, with significant declines after the publishing of the Center for Disease Control and Prevention (CDC) 2016 opioid guideline.⁷ Despite these declines, opioid-related morbidity and mortality continued to rise, underscoring the complexity of the crisis.

The opioid overdose epidemic has evolved through distinct waves, beginning with deaths related to prescription opioids, followed by sharp increases in heroin-involved fatalities, and most recently, a surge in deaths involving synthetic opioids such as illicitly manufactured fentanyl.⁸ While prescription opioids once accounted for the majority of opioid-related overdose deaths, they now represent a smaller fraction. In 2023, over 70% of opioid overdose deaths involved synthetic opioids (specifically illicitly manufactured fentanyl),⁹ reflecting the increasing lethality of the illicit drug supply and the limitations of focusing exclusively on prescription control as a prevention strategy.

Simultaneously, disparities in both pain management and access to evidence-based treatment of OUD persist. Racial and ethnic minorities, individuals with low income, and rural populations are more likely to experience inadequate pain care, despite similar or higher pain prevalence.¹⁰ These groups are also less likely to receive medications for OUD (MOUD), such as buprenorphine or methadone,¹¹ due to stigma, workforce shortages, and systemic inequities. For instance, Black patients with OUD are significantly less likely than White patients to be prescribed buprenorphine, even when presenting with similar clinical needs.¹²

Against this backdrop, public health framing has increasingly emphasized the need to balance the risks of opioid overprescribing with the consequences of undertreatment.

Efforts to more aggressively deprescribe opioids have been associated with unintended harms, including poorly managed pain and worsened mental health,^{13,14} transition to illicit opioids,¹⁵ overdose, and suicide.^{14,16} Additional consequences of opioid deprescribing specific to primary care include disengagement from care,¹⁷ loss of trust between patients and providers,¹³ and possible reduction in quality of chronic condition management.^{17,18} Public health guidance now calls for individualized, patient-centered care that avoids both overreliance on opioids and blanket restrictions, while expanding access to nonopioid pain management, harm reduction services, and MOUD.¹⁹ Addressing this evolving crisis requires nuanced strategies that recognize the ongoing burden of pain, eliminate inequities in care, and integrate prevention, treatment, and harm reduction within a comprehensive public health framework.

PRINCIPLES OF OPIOID STEWARDSHIP

Opioid stewardship is a structured, evidence-based approach that promotes safe, individualized prescribing. Rather than eliminating opioids, it supports appropriate use—at the lowest effective dose, for the shortest necessary duration—tailored to patient needs and risks.¹⁹

Several National Bodies Have Published Frameworks to Guide Stewardship in Primary Care

The Department of Health and Human Services Pain Management Best Practices Inter-Agency Task Force Report,¹⁹ the Department of Veterans Affairs (VA)/DoD 2022 Clinical Practice Guidelines,²⁰ the updated CDC 2022 Clinical Practice Guideline for Prescribing Opioids for Pain,²¹ and the National Quality Forum (NQF) Opioid Stewardship Playbook.²² Tools from both The Joint Commission²³ and Agency for Healthcare Research and Quality (AHRQ)²⁴ further support implementing stewardship principles into clinical settings. Important principles of opioid stewardship synthesized from these guidelines are summarized in [Table 1](#), and further detailed in later discussion.

OPIOID PRESCRIBING IN PRIMARY CARE

The notion of “appropriateness” in opioid prescribing is an important tenet of stewardship but is not uniformly defined or understood. For example, the CDC 2016 Clinical Practice Guideline for Prescribing Opioids for Pain²⁵ was widely misapplied in practice, with the 50 morphine milligram equivalents (MME) and 90 MME dosage levels interpreted as a strict mandate, contributing to significant trends in deprescribing, involuntary opioid tapering, and patient abandonment.^{7,19} The updated 2022 guidelines clarified that dosage recommendations are intended as clinical reference points, not fixed limits.²¹ In fact, evidence suggests that overdose risk is more closely associated with individual patient risk factors than with MME thresholds alone.²⁶ These recommendations support shared decision-making informed by patient-specific factors. Generally agreed upon components of appropriate opioid prescribing emphasize: (1) prioritizing nonopioid modalities in the management of chronic pain, (2) avoiding initiating long-term opioid therapy (LTOT) unless other treatment options have been unsuccessful, (3) when initiating opioids, prescribing the lowest effective dose for the shortest duration necessary, and (4) caution with higher doses due to an increasing risk of overdose.

Assessment of Pain and Function

Pain assessment in primary care should go beyond intensity scales, such as the Numerical Rating Scale,²⁷ incorporating functional goals and psychosocial context.

Table 1 Opioid stewardship principles	
Stewardship Principle	Takeaways
Appropriate opioid prescribing	• Avoid initiation of long-term opioid therapy unless other treatments have failed • Nonopioid analgesics and other modalities should be first-line in pain management • Prescribe the lowest effective dose for the shortest duration necessary • Caution with high doses due to increased overdose risk; ≥ 50 MME and ≥ 90 MME are clinical reference points (not dose limits)
Assess risks, monitor regularly	• Routine use of risk assessment tools and prescription drug monitoring programs is advised • Individual risks and benefits should be assessed at regular intervals
Overdose risk mitigation	• Importance of overdose education and provision of naloxone to all patients at risk of opioid overdose (especially those on higher doses or coprescribed benzodiazepines)
Minimize use of opioids + benzodiazepines	• Coprescription increases risk of respiratory depression; avoid or use caution
Identify patients with OUD and facilitate MOUD access	• Screen for OUD in patients prescribed opioids • Patients with OUD need access to buprenorphine or other medication for opioid use disorder • Initiate buprenorphine in primary care setting when feasible
Use shared decision-making	• Collaborate with patient to make informed, individualized treatment plan
Taper opioids safely when needed	• Offer gradual tapering with behavioral support and alternatives when the risks of ongoing opioid therapy outweigh the benefits • Avoid abrupt discontinuation to prevent withdrawal and psychological harm

Evidence-based tools that may inform care decisions focus on evaluating function, such as the Pain, Enjoyment, and General Activity (PEG) scale.²⁸ Providers should ensure a thorough diagnostic workup to best understand the patient's pain. A plan should be discussed with the patient and documented, including realistic expectations for functional activity, prior to LTOT initiation.²⁹

Opioid Therapy Among Other Tools

Consider opioid therapy after nonpharmacologic and nonopioid pharmacologic options have been trialed for sufficient duration at optimal dosage. Existing evidence supports potential effectiveness of several nonpharmacologic interventions, such as exercise therapy, physical therapy modalities, mind body interventions (specifically Tai Chi, yoga, and mindfulness-based stress reduction), acupuncture, massage, and psychological therapies.³⁰ Clinicians can also consider nonopioid analgesic medications such as nonsteroidal anti-inflammatory drugs, antidepressants, gabapentinoids, and topical agents, and may also refer to a specialist to explore interventional

modalities. A trial of short-acting full mu agonists may be considered when alternatives are ineffective.

Prior to initiation, clinicians should evaluate risk factors such as psychiatric comorbidities, history of substance use disorder, concurrent sedative use, ideally using a validated tool (eg, Opioid Risk Tool, or ORT).³¹ Shared decision-making around opioid initiation and continuation should involve carefully discussing with the patient the risks, side effects, and intended benefits associated with opioid therapy.

Buprenorphine as an Alternative for Pain

As an alternative to full mu agonist opioids, providers may consider utilization of buprenorphine. Stemming from its unique mechanism of action as a mixed opioid agonist/antagonist, buprenorphine has a ceiling effect on respiratory depression (when used without concomitant central nervous system depressants). It also has fewer long-term side effects and is safer in patients with renal impairment, older age, or opioid sensitivity.³²

Re-evaluating Legacy Prescribing

From the 1990s through 2015, many patients were placed on long-term, high-dose opioid regimens. As prescribing providers retire or relocate, or insurance changes force patients to change providers, new clinicians may not wish to continue LTOT prescribing for a variety of reasons. However, abrupt discontinuation or rapid tapering may increase the risk of withdrawal, overdose, mental health crisis, and death. Clinicians are encouraged to continue LTOT prescribing while conducting a thorough patient evaluation, and develop an individualized treatment plan following discussion with patient. A patient-centered plan may include continuation or tapering of opioids, referral to pain specialty care, or if appropriate, transition to buprenorphine.³³

Use of Risk Mitigation Strategies

National guidelines from the CDC²¹ state that urine drug screening (UDS), prescription drug monitoring programs (PDMPs), and opioid agreements can be employed as risk mitigation strategies for opioid overdose or misuse. These are also in line with opioid stewardship metrics from NQF,²² American Hospital Association,³⁴ and AHRQ.³⁵ These tools should not be employed as punitive measures but rather as components of a structured, patient-centered approach that supports safe, effective opioid therapy in primary care.

Urine Drug Screening

Many care guidelines recommend annual UDS, which is intended to ensure safe opioid use and identify possible substance use disorders. However, common UDS techniques can have false-positive and false-negative results, especially if only qualitative assay is performed. These test features may lead to misinterpretation and unintended consequences, including stigmatization and inappropriate dismissal from care. They are also inconsistently ordered by clinicians.³⁶ When able to, clinicians should request quantitative confirmatory results, and discuss unexpected results with patients in a nonjudgmental manner, rather than as definitive evidence of aberrancy, recognizing the important limitations of the test.

Prescription Drug Monitoring Programs

PDMP's are state-managed electronic databases through which clinicians can monitor dispense history and prescribing practices. As a clinical support tool, PDMP can help identify patterns that may signal increased risk, such as overlapping prescriptions

from multiple providers. Of note, clinicians are unable to view dispense data from the VA system and cannot consistently access data from outside their state. State laws may require prescribers to check PDMP prior to submitting an opioid prescription and periodically during LTOT. Available evidence for the impact of PDMP as an opioid risk-mitigation tool remains mixed.³⁷

Opioid Treatment Agreements

An opioid treatment agreement can be viewed as a written care plan between clinician and patient. It should establish clear communication between clinicians and patients when initiating or continuing LTOT. These agreements are not legal contracts, but convey shared understanding of the goals, expectations, and responsibilities involved in opioid use for chronic pain. When used appropriately, they can provide a framework for addressing concerns like side effects, refills, missed appointments, and potential misuse. These can also offer the opportunity to discuss monitoring strategies, such as UDS or PDMP checks and can help the patient understand these as a routine rather than indication of distrust. However, research to date has found weak or inconclusive evidence of the effectiveness of treatment agreements in reducing opioid misuse by patients with chronic pain.³⁸

Coprescribing Naloxone

Naloxone coprescribing has emerged as a standard of practice and can be a life-saving intervention for patients at risk of opioid overdose. Naloxone should be offered to patients who have an increased risk of overdose, such as patients with 50 or greater MME/d, history of previous overdose or substance use disorder, or concurrent benzodiazepine prescription.²¹ Providers may, however, consider prescribing naloxone for any patient on any opioid dose. Patients and their close supports should be educated on overdose identification and naloxone use. As of March 2023, the Food and Drug Administration approved Narcan nasal spray to be available over-the-counter.³⁹

MANAGING OPIOID USE DISORDER IN PRIMARY CARE

Screening for and Diagnosis of Opioid Use Disorder

PCPs play a critical role in identifying OUD, especially among patients on LTOT.⁴⁰ With the time constraints of typical primary care visits, effective screening tools like the Drug Abuse Screening Tool (DAST)⁴¹ or National Institute on Drug Abuse (NIDA) Quick Screen⁴² can be integrated into routine care, helping to identify at-risk individuals efficiently.

Diagnosis of OUD follows Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5) criteria,⁴³ focusing on patterns of opioid misuse such as loss of control, continued use despite harm, and cravings. It is important to distinguish between physical dependence from prescribed opioids and actual OUD; tolerance and withdrawal alone are not diagnostic of OUD. In brief visits, PCPs should engage patients with direct, nonjudgmental questions about opioid use behaviors, ensuring to build a trusting patient-provider partnership. American Society of Addiction Medicine (ASAM) guidelines emphasize the role of primary care in both diagnosis and ongoing management of OUD.⁴⁴ Early recognition and intervention, including initiating medications for OUD, are key components of opioid stewardship and improving patient outcomes.

Motivational Interviewing and Stigma Reduction

Empathetic engagement, including motivational interviewing (MI), strengthens therapeutic alliances and supports behavior change. The primary care visit offers an access point for the treatment of OUD, and the interaction can activate neurobiological

pathways critical to recovery. Human connection, especially when grounded in empathy and trust, is linked to dopamine release, offering a counterbalance to the dysregulated reward systems in OUD.⁴⁵ Even brief MI interventions can foster this connection, helping patients explore ambivalence and move toward change. This approach fits into the time constraints of primary care and naturally extends from screening tools like DAST.⁴⁶

Stigma in clinical language and records undermines these therapeutic relationships. Bias-reinforcing diagnostic codes in medical records has been shown to influence provider perceptions and compromise care.⁴⁷ Using person-first, nonjudgmental language—such as “person with OUD”—is a small way to reduce stigma and foster trust.⁴⁸ The 21st Century Cures Act emphasized reducing stigma and integrating behavioral health into primary care.⁴⁹ With this support, PCPs are positioned to lead in effective, compassionate OUD care—offering both medical and relational healing.

Buprenorphine Initiation and Maintenance

PCPs are well-positioned to prescribe buprenorphine for OUD, given their longitudinal relationships with patients and comfort managing complex chronic conditions. The elimination of the Drug Addiction Treatment Act of 2000 (DATA) waiver requirement has removed significant barriers to prescribing,⁵⁰ allowing PCPs to engage more readily in OUD treatment.⁵¹ Further, PCPs can collaborate with emergency department clinicians who may initiate buprenorphine during acute care episodes. In alignment with ASAM’s treatment framework,⁴⁴ maintenance can be managed effectively in primary care through ongoing monitoring, patient engagement, and appropriate psychosocial support, making buprenorphine a vital tool in comprehensive opioid stewardship strategies within the primary care setting.⁵²

Collaboration with Clinical Pharmacists

Pharmacists are increasingly vital to opioid stewardship in primary care. Embedded in clinical teams or practicing under collaborative practice agreements (CPAs), they expand access to medications like buprenorphine and help prevent opioid-related harms. The elimination of the federal X-waiver has broadened buprenorphine prescribing authority. In 11 states, advanced-practice pharmacists can independently prescribe controlled substances under CPAs, including buprenorphine.⁵³ Pharmacists also play a collaborative role in chronic pain care by supporting opioid rotation to buprenorphine, managing prior authorizations, and overseeing treatment response. These efforts align with national strategies for safer LTOT.^{19,21} Despite these advances, pharmacists’ capacity to provide care is hindered by regulatory ambiguity, fear of federal enforcement, and inconsistent stocking practices.⁵⁴ Fewer than 60% of US pharmacies consistently stock buprenorphine, contributing to geographic and structural disparities.⁵⁵ Policy reform, workforce investment, and protections for clinical decision-making are needed to unlock pharmacists’ full potential as partners in expanding equitable, patient-centered opioid stewardship in primary care.⁵⁶

Coordination with Behavioral Health and Peer Support

While medication management with buprenorphine is the backbone of the treatment of OUD, holistic care also addresses psychological and social needs. PCPs often link patients to individualized counseling for anxiety or depression, making behavioral health integration for OUD care a natural extension of routine workflows. Although incorporating therapy improves retention and outcomes for OUD treatment, access is limited by provider shortages, cost, and insurance barriers, especially in underserved areas.⁵⁷ Peer recovery support, offered by individuals with lived substance

used disorder experience, further strengthens care by reducing stigma and increasing engagement.⁵⁷

BARRIERS AND CONTROVERSIES IN OPIOID STEWARDSHIP

Fear of Regulatory Scrutiny

Providers may express fear of regulatory oversight and professional liability regarding opioids, which can lead to defensive prescribing, underprescribing, overdocumentation, or abrupt opioid discontinuation.¹⁹ While such fears are not unfounded, these practices have implications for the patient-provider relationship.

Knowledge Gaps and Discomfort

Uncertainty about guidelines, limited formal pain management or addiction medicine training, and discomfort with analgesic and opioid management may contribute to variability in care.¹⁹ Clinicians can greatly benefit from clinical mentoring, access to specialist consultation, and expanded education in multimodal pain management and OUD treatment.

Chronic Pain Advocacy and Concerns about Undertreatment

Groups continue to highlight the importance of individualized care with the understanding that every patient's chronic pain is different, and there is no "one-size-fits-all" policy. Advocates for people with chronic pain argue that aggressive opioid-reduction policies have led to unintended harms, including undertreatment and abandonment of patients. Balancing the need for effective pain management with the risks of opioid therapy remains a significant challenge. The National Pain Advocacy Center warns that misapplied guidelines may exacerbate suffering among stable patients who previously benefited from opioid therapy, and increasing evidence elucidates unintended harms associated with opioid tapering in previously stable patients.^{14,16} Many patients feel stigmatized and marginalized by rapid tapering policies and seek reassurance that their pain will continue to be treated compassionately.

SUMMARY

Opioid stewardship in primary care is both a clinical necessity and a public health imperative. As frontline clinicians in the management of both pain and OUD, PCPs are uniquely positioned to implement individualized, evidence-based strategies that improve patient outcomes and reduce opioid-related harms. This includes adopting multimodal pain management approaches, using opioids judiciously, screening for and treating OUD with buprenorphine, and addressing stigma through empathetic, patient-centered care. Success depends not only on clinical acumen but also on system-level supports, including collaborative care models, access to behavioral health, clinical pharmacy integration, and clear regulatory guidance. Despite challenges—including regulatory fear, access disparities, and conflicting expectations—primary care clinicians have powerful tools to deliver safe, compassionate, and effective care.

CLINICS CARE POINTS

- *Prioritize nonopioid therapies* first for chronic pain management; consider opioids only when other options are ineffective and with clear functional goals.
- *Prescribe opioids at the lowest effective dose and shortest duration* necessary; 50 or greater MME/d should prompt heightened caution but are not absolute limits.

- *Avoid abrupt opioid discontinuation or rapid tapering*; individualized tapering should include patient collaboration, monitoring, and alternative support.
- *Use validated tools* (eg, ORT and PEG scale) to assess pain, function, and risk before and during opioid therapy.
- *Employ risk mitigation strategies*—including PDMPs, UDS, and treatment agreements—as supportive tools, not punitive measures.
- *Coprescribe naloxone* for patients at elevated risk of overdose, including those on high-dose opioids or concurrent benzodiazepines.
- *Recognize and diagnose OUD* in primary care settings using tools like the DAST and DSM-5 criteria.
- *Initiate and maintain buprenorphine* for OUD in primary care; recent regulatory changes (eg, removal of X-waiver) support broader prescribing.
- *Use stigma-free, person-centered language* and MI to foster trust, reduce harm, and support engagement in care.
- *Collaborate with pharmacists, behavioral health, and peer support specialists* to optimize safe opioid use, manage OUD, and improve continuity of care.

DISCLOSURE

All authors declare they have no conflicts of interest to disclose.

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